



Dean K. Matsuura
Manager
Regulatory Affairs

May 4, 2009

The Honorable Chairman and Members of the
Hawaii Public Utilities Commission
Kekuanaoa Building, First Floor
465 South King Street
Honolulu, Hawaii 96813

FILED
2009 MAY -4 P 4: 04
PUBLIC UTILITIES
COMMISSION

Dear Commissioners:

Subject: Docket No. 2008-0303 – AMI Application
HECO Companies' Confidential Exhibits

Pursuant to the Protective Order approved by the Commission on April 15, 2009 in this proceeding, the HECO Companies¹ provide the following confidential exhibits:

Exhibit 1(A) - Advanced Metering Infrastructure Equipment and Services Agreement between Sensus Metering Systems, Inc. and Hawaiian Electric Company, Inc., executed on October 1, 2008 ("Sensus Agreement");

Exhibit 7, pages 5 to 8 and 10 to 21.

A summary of the Sensus Agreement was provided as Exhibit 1 in the Advanced Meter Infrastructure ("AMI") application. The Companies stated that the Advanced Metering Infrastructure Equipment and Services Agreement between Sensus Metering System and HECO was confidential and proprietary and would be provided after a protective order was issued in this docket.² The Companies hereby submit the confidential Sensus Agreement as Exhibit 1(A) to the AMI application.

Also, the HECO Companies are resubmitting the following documents that were treated as "confidential" in the AMI application and are now classified as "non-confidential" documents:

Exhibit 3, Page 11

¹ The "HECO Companies" or "Companies" are Hawaiian Electric Company, Inc. ("HECO"), Hawaii Electric Light Company, Inc. ("HELCO"), and Maui Electric Company, Limited ("MECO").

² See Section V, Part B, on page 12 of the AMI application.

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Exhibit 7, Pages 1 to 4 and 9
Exhibit 9, Page 2
Exhibit 10

The reclassification was based on subsequent clarifications from the vendors that the documents are no longer considered to be confidential.

Very truly yours,



Dean K. Matsuura
Manager, Regulatory Affairs

Enclosures

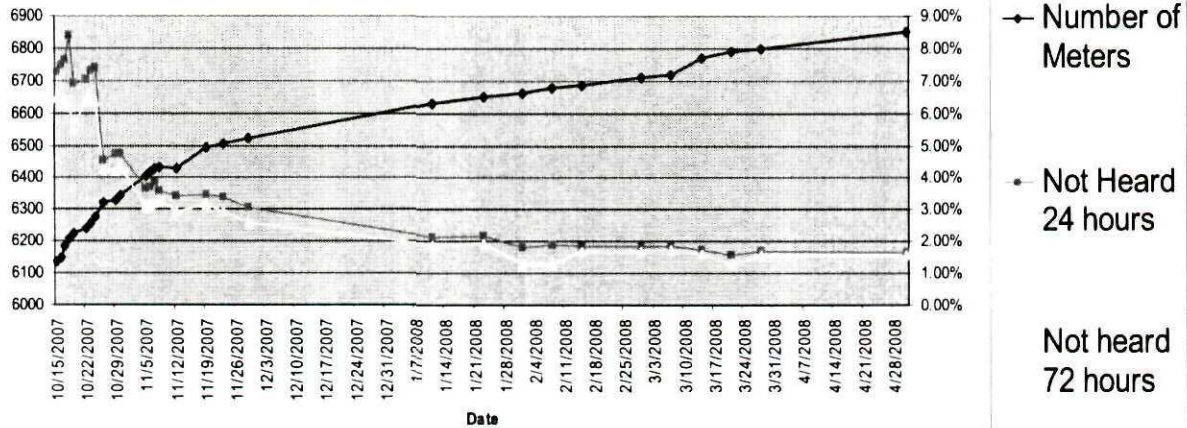
cc: Division of Consumer Advocacy
Henry Q Curtis / Kat Brady, Life of the Land
Warren S. Bollmeier II, Hawaii Renewable Energy Alliance
Mark Duda, Hawaii Solar Energy Association



Pilot System Performance and Performance History

All Flex Meters				
3/28/2008		TOTAL	Residential	C&I
Total Flex Meters Installed		6853	6233	620
Meters not heard	Based on 24 hour no message:	112	70	42
Poor Communication Rate:		1.63%	1.12%	6.77%
Meters not heard	Based on 72 hour no message:	106	67	39
Poor Communication Rate:		1.55%	1.07%	6.29%

Baseline Meter population (OP, CLS, CPP, NMLB)				
3/28/2008		TOTAL	Residential	C&I
Total Flex Meters Installed		4093	3621	472
Meters not heard	Based on 24 hour no message:	1	1	0
Poor Communication Rate:		0.02%	0.03%	0.00%
Meters not heard	Based on 72 hour no message:	1	1	0
Poor Communication Rate:		0.02%	0.03%	0.00%
C&I Meters Satisfactorily downloading Billing Quality LP				79.43%



Note: The graph above is based on a point in time when pilot system contained 6,853 AMI meters.

Enspira Solutions

Inspired Energy Solutions

Corporate Overview

Enspira® Solutions, Inc. — a company dedicated to the energy and utility marketplace — offers a unique combination of experience, strategy, and implementation expertise. Enspira Solutions helps utilities improve operational effectiveness, asset performance, customer service, and energy efficiency.

Enspira Solutions experts provide business and technology consulting, systems integration and implementation, data services, lifecycle data management, and maintenance/upgrade services. The company is backed by the financial strength of parent company Osmose Holdings, Inc., with over \$600 million in revenue.

Enspira offers solutions based on proven industry software products, integration standards, and business models. Providing rapid delivery through integration frameworks and configurable solutions, we deliver complete business solutions, not just enabling technology. These services enable utilities to fully realize the benefits of past, current, and future technology investments. We specialize in:

- ▶ Advanced Metering Infrastructure/Automated Meter Reading (AMI/AMR) and Meter Data Management Systems (MDMS)
- ▶ Substation/Distribution Automation
- ▶ Geographic Information Systems (GIS)
- ▶ Outage Management Systems (OMS)
- ▶ Mobile Work Management and Field Force Automation
- ▶ Work Management Systems (WMS)
- ▶ Asset Management

AMI and MDMS Expertise

Enspira Solutions has real-world experience, in-depth insights and practical experience. More than 20 utilities have turned to the Enspira team for help in defining and implementing smart metering and smart grid strategies – strategies impacting over 40 million meters across North America.

Our staff maintains knowledge of a range of Smart Metering technologies, and has real-world experience implementing AMI, MDMS, DR and Smart Grid solutions. We provide a full suite of services to help our clients maximize the benefits of these complementary and enabling technologies. We assist utilities throughout the entire technology implementation lifecycle, including:

- ▶ Visioning and strategic planning
- ▶ Requirements specification



Proprietary and Confidential

Qualifications



- ▶ Business structure options and business case development
- ▶ Technology assessment
- ▶ Development of AMI/MDMS-enabled to-be business process models
- ▶ Competitive solicitation/RFP development and administration
- ▶ Technology/vendor selection and negotiations
- ▶ Enterprise architecture design and solution implementation roadmap
- ▶ System deployment and integration
- ▶ System operations and benefits realization

Enspira brings unique knowledge and experience in realizing AMI and MDMS benefits across the utility enterprise – from customer service, metering and billing, revenue and energy management to Transmission and Distribution system planning and operations, outage and asset management.

Enspira Solutions personnel have supported the Automatic Meter Reading Association (now Utilimetrics) for many years through session coordination, papers, presentations, and courses. Enspira Solution is also a member of the Advisory Committee of DistribuTECH, which has a strong focus on AMI/MDMS and enterprise integration with related technologies.

Enspira personnel are heavily involved in the industry and develop articles, and present papers and courses. The following sample list represents our most recent recognition in terms of press, conference, and symposium presentations.

Press Articles

- ▶ Asset Management for Advanced Metering Infrastructure, *Electric Energy T&D Magazine*, Sept/Oct 2007
- ▶ Advanced Metering Gets Smarter (Executive Roundtable), *Next Generation Power and Energy* (Q3 2007)
- ▶ Planning Guide for AMI: How to manage the metering selection process, *Public Utilities Fortnightly*, September 2007
- ▶ How Vendor Mergers are Shaping T&D, *Utility Automation and Engineering T&D* (July 2007)
- ▶ AMI and Smart Grid Deployment: Geographic sequencing by benefit maximizes utility ROI, *Utility Automation AMR and Metering eNewsletter* (October 2006)
- ▶ AMR Improves Outage Management: PECO OMS Integration Provides Operation and Maintenance Savings, Shorter Outages, and More Satisfied Customers, (Co-authors David Glenwright and Glenn Pritchard, Exelon), *Transmission and Distribution World*, September 2006.
- ▶ Integrating GIS and AMR to Increase Enterprise Benefits, *Utility Automation and Engineering T&D* (May 2006)
- ▶ Analyzing the Benefits of AMR, *Electric Light & Power* (July/August 2005)
- ▶ Meter Data Management System — What, Why, When, and How, *Energy Central's Energy Pulse* (August 2005)

Qualifications



- ▶ Enhance Automated Meter Reading System Ability (Using GIS), *ESRI Energy Currents* (Fall 2005)
- ▶ "AMR Improves Outage Management: PECO OMS integration provides operation and maintenance savings, shorter outages, and more satisfied customers," *T&D World*, September 2006
- ▶ Succeeding at Systems Integration, *Hart Energy Markets* (April 2005)

Presentations

- ▶ AMI: Strategies and Processes around the AMI Lifecycle, Metering, Billing/CIS America 2008
- ▶ Blazing New Trails in Portland's Million Meter AMI System Implementation, DistribuTech 2008 (co-presentation with PGE)
- ▶ Meter Data Management and Enterprise Integration, DistribuTech 2008 — Panel organizer and moderator
- ▶ Pre-deployment area selection and deployment sequencing at Alliant Energy, DistribuTech 2008 (co-presentation with Alliant)
- ▶ And the Names Keep Changing: How Vendor Mergers are Shaping the Energy Delivery Industry, DistribuTech 2008 — Panel organizer and moderator
- ▶ Technical and Operation Considerations in Using Smart Metering for Outage Management to the Submission Site, 2008 IEEE PES Transmission and Distribution Conference
- ▶ AMI for Business Process Change, Chartwell Audio Conference, October 2007
- ▶ Pre-deployment Area Selection and Deployment Sequencing at Alliant Energy, AMRA 2007 (with Alliant)
- ▶ AMI Planning & Pre-Deployment at San Diego Gas & Electric, AMRA 2007 (with SDG&E)
- ▶ AMR/AMI Activities — Emerging Issues, Southeastern Electric Exchange (SEE) Conference, June 2007
- ▶ How to Mine the Data and Get Paid for It, Metering and CRM/CIS America 2007
- ▶ AMI: Taking Metering and Data Applications into the Next Generation, Chartwell's Advanced Metering Summit 2007 (also a featured panelist for the conference)
- ▶ AMI/AMR Benefits for Electric T&D — What Is For Real?, DistribuTECH 2007
- ▶ AMI and Smart Grid — A Battle or Alliance for the Utility of the Future; DistribuTECH 2007
- ▶ Meter Data Management System — What, Why, When, and How, American Utility Week/Metering America 2006
- ▶ Using AMR to Enhance Electric Operations and Drive Benefits: Going beyond the Meter Read: Advanced Metering Applications, Chartwell's 2006 Advanced Metering Summit
- ▶ Integrated Resource Planning Revisited — with AMI and Demand Response, 2006 Smart Metering Conference, Ontario Canada
- ▶ Experience in Planning and Implementing a Meter Data Management System, DistribuTECH 2006

Qualifications



- ▶ Use AMR to Improve Outage Management, TechAdvantage 2006
- ▶ Web-enabling AMR Technologies for CSRs, DistribuTECH 2006
- ▶ Enterprise Integration to Enhance NMR Benefits (JEA case study), EUCI-UISOL 2005 Annual Utility Integration Conference
- ▶ AMR: How to Maximize the Benefits of Automated Meter Reading Enterprise-wide, IEEE REPC 2005

Courses

- ▶ AMI/MDM – Technology That Can Change Your Future (full-day course), CS Week 2008 (co-teaching)
- ▶ AMI-AMR-MDM – A Primer (workshop), CS Week 2008
- ▶ AMI and MDMS – Technology that Can Change Your Future (full-day course), 2007 CIS Conference and AMRA 2007 (co-teaching)
- ▶ Utility Business Transformation with AMI, DR, and Smart Grid (half-day course), AMRA 2007
- ▶ Enterprise Integration of AMI, 2006 AMRA International Symposium (half-day course)
- ▶ How to Achieve Enterprise-Wide Business Optimization and Benefits through AMR, 2005 AMRA International Symposium (half-day course)
- ▶ Improved Outage Management training module, Penn State University — Power Engineering Program (full-day course, October 2005 and 2006)
- ▶ How to achieve enterprise-wide business optimization and benefits through AMR, DistribuTECH 2005 (Utility University Course)
- ▶ Enterprise Integration, 2004 IEEE Power Systems Conference (half-day tutorial)

Project Experience

The Enspira Solutions staff has worked at utilities across North America, and worldwide. Each member of our technical staff has been extensively involved in conception, development, implementation, and integration of utility and business technology systems. Representative client organizations that our staff has recently supported are presented in Table 1. We met and/ or exceeded client expectations with regards to budget and schedule performance on all projects.

Qualifications



Personnel Qualifications

Enspira Solutions' professional staff has been planning, designing, and implementing information and automation technology solutions for energy utilities for decades. Our consultants come from the utility business sector and the information and automation technology industry, thereby combining the unique mix of subject matter expertise and technical proficiency to bring real solutions to real business problems.

In addition to their experiences on Enspira projects, the proposed consultants bring with them years of related experience before joining Enspira. They have hands-on experience across all phases of the technology solution implementation lifecycle — from planning and architectural design to procurement, micro-designs, development, deployment, maintenance, support, and benefits realization. The team also possesses depth and breadth of experience across the utility business — from customer services, metering, and billing to transmission and distribution system planning, network management, energy management, system operations, and outage management. In addition to extensive AMI expertise, they also possess hands-on experience managing the regulatory processes and hurdles associated with AMI.

A representative cross-section of Enspira consultants and technical personnel and their related expertise is presented in Table 2. Table 3 provides additional details regarding selected individuals.

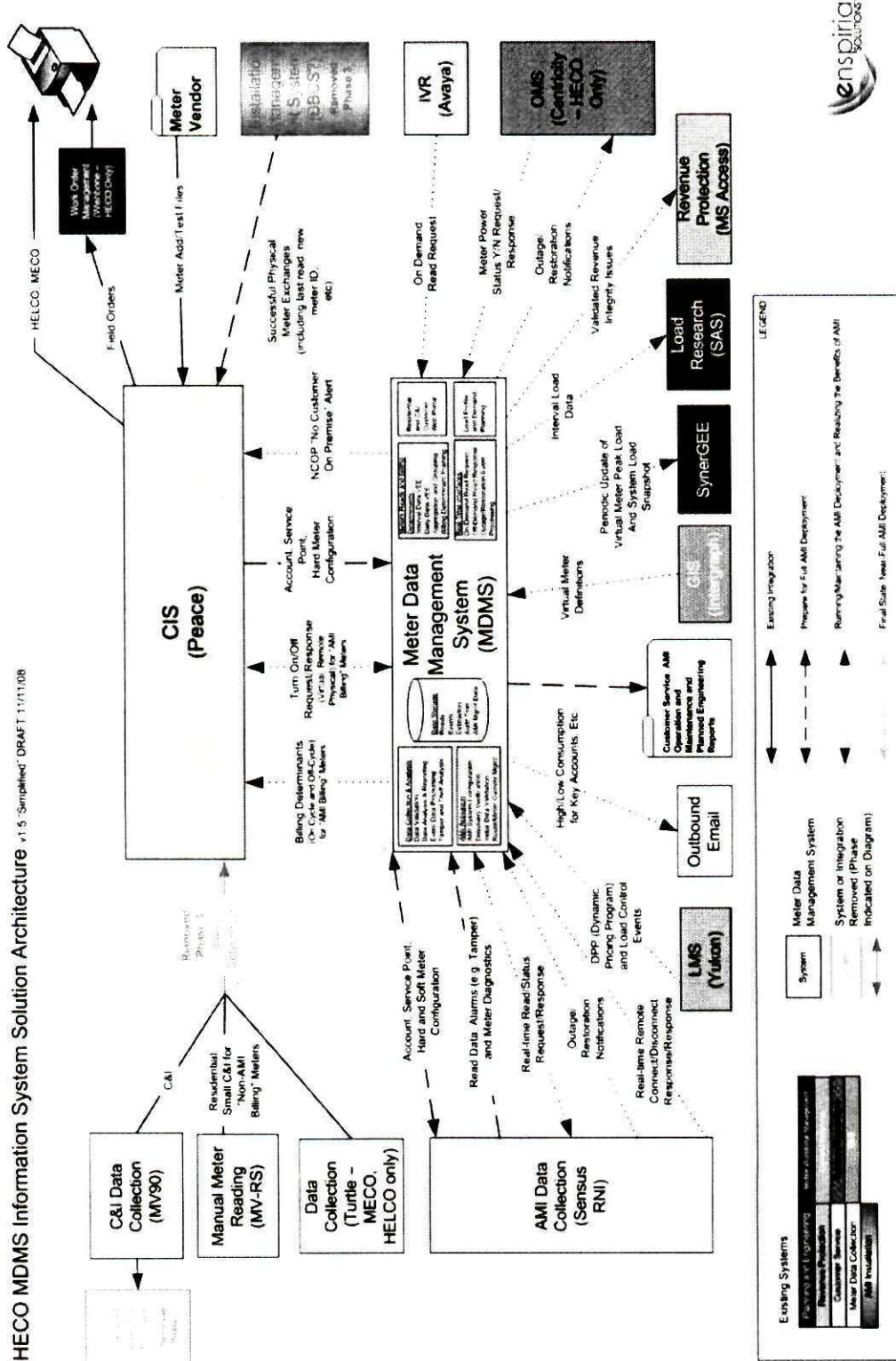


Figure 1 – MDMS Architecture

Sensus Metering Systems Products



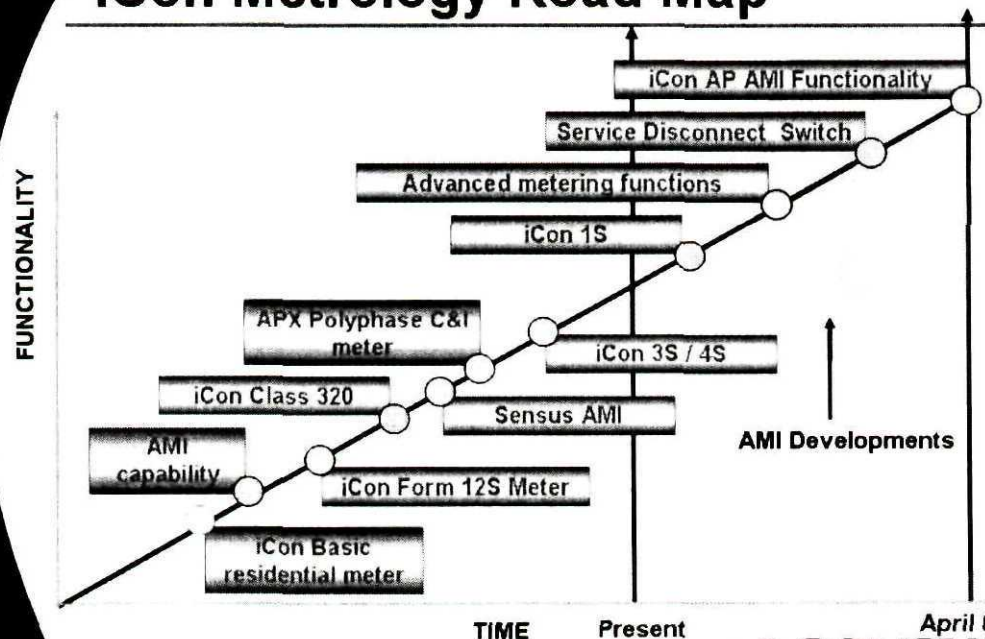
**Primary Use Spectrum
Promotes Immediate Access**

confidential

Two-Way & Real Time Capability

C&I: instant On-Demand, 5 Min Interval, 15 Min Interval
Residential: 15 Min, 1 Hour, 12 Hour, 24 Hour Reads, kWh & Actual Voltage
Power Fail, Restoral and Brown-Out Notification from Each Meter
Programmable Read Interval
Programmable Low Voltage Warning
Programmable Breaker Reclosure Warning
Programmable Power Fail Alarm, Minimum Outage Time
Remote Meter Disconnect /Reconnect
15 Minute Demand Interval Reset
C&I C12.19Table Tunneling
Real-Time Clock Calibration for "Top of the Hour" Reads:
TOU Billing & Consumption Correlation
Energy Management Programs – Load Shed, Wireless Thermostats
Text, Rate Change Notification
Load Shed and Restore
Hot Socket Detect
All Programmable Meter Functions Accessible Via Secured Website

iCon Metrology Road Map



TIME Present

April 07



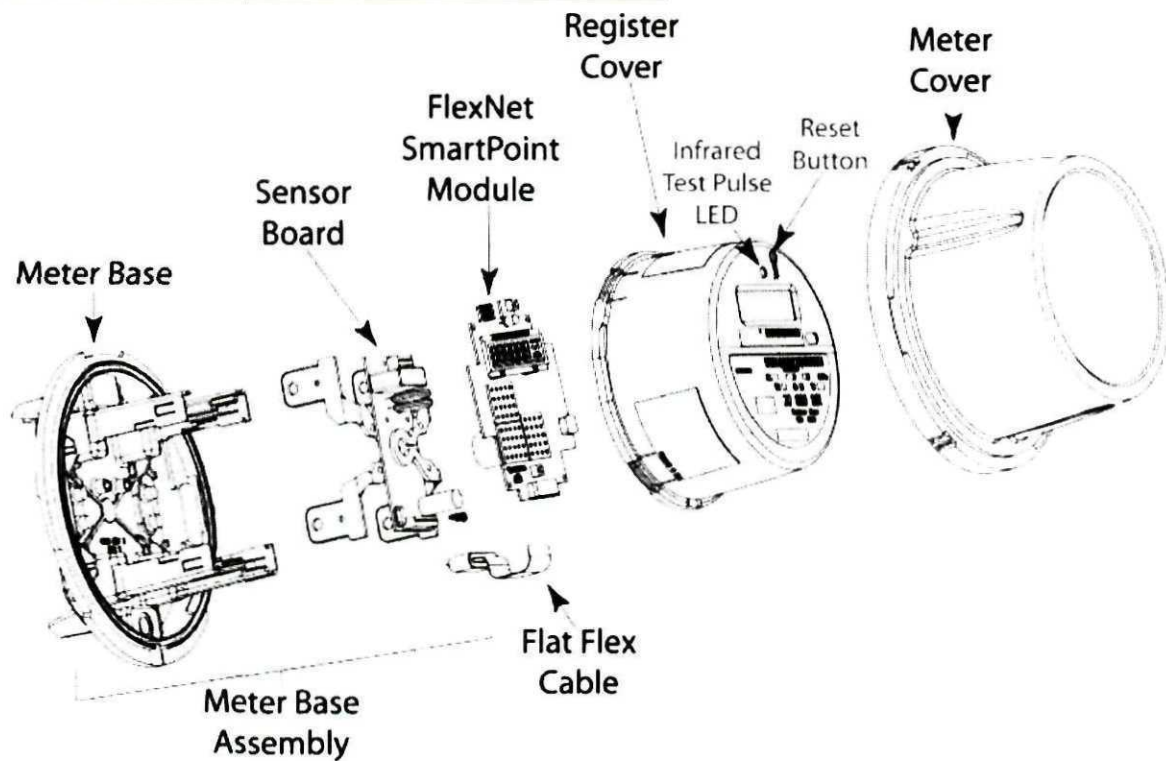
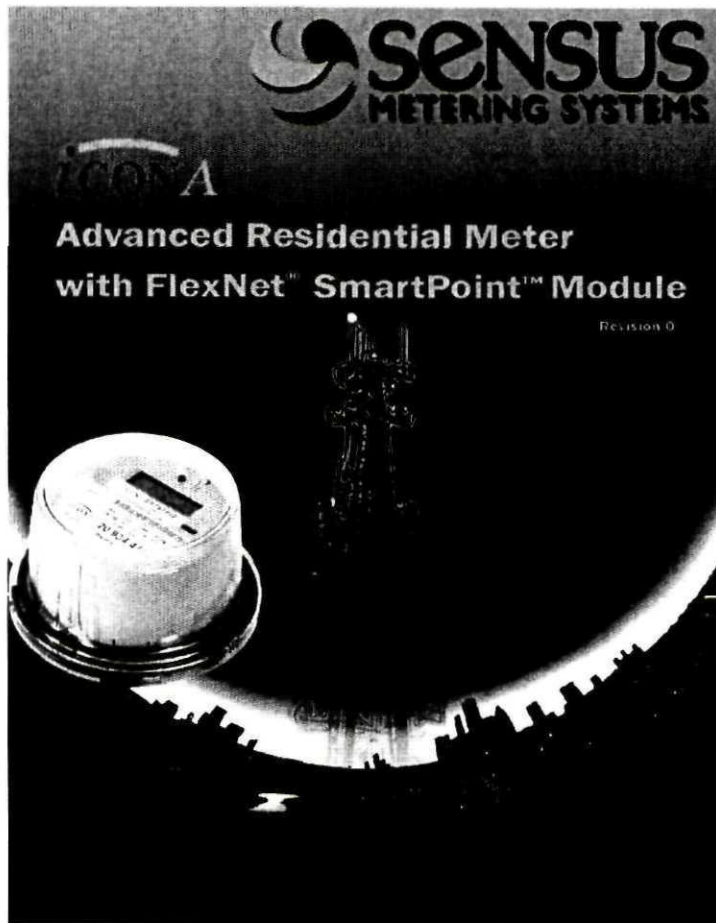
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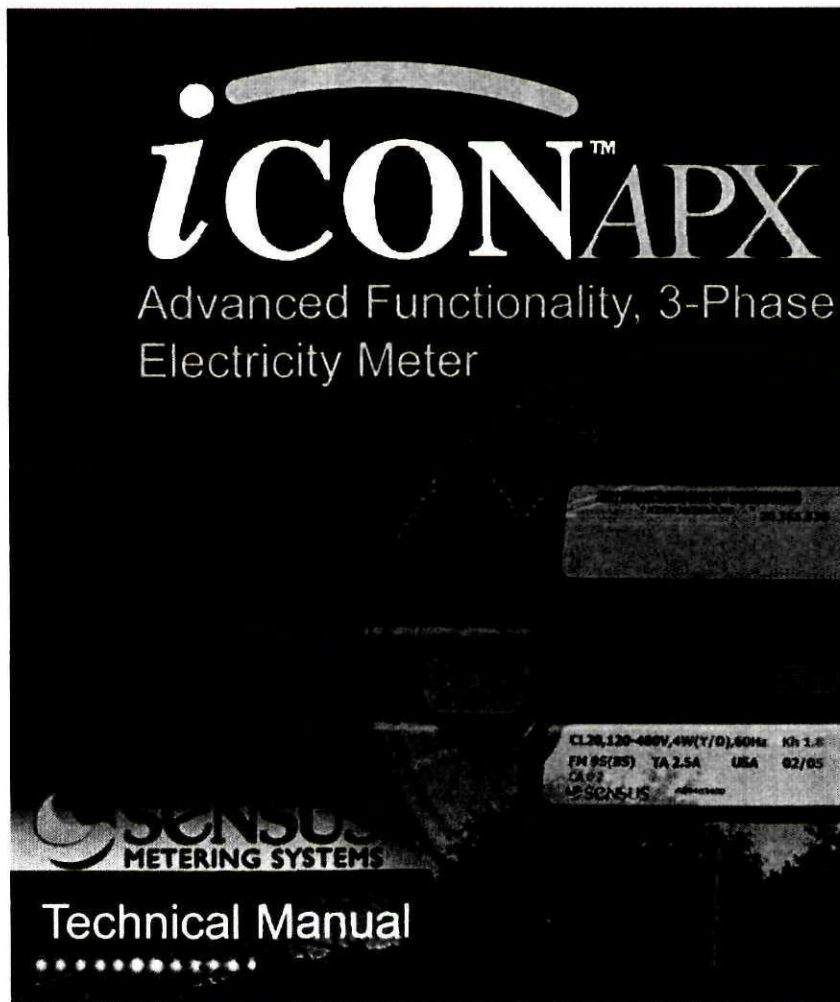
Smart Metering Flexibility

- Energy Consumption
- Demand, TOU
- Net-metering
- Voltage Measurement
 - Current, Avg. – Min – Max since last read
- Interval data with FlexNet
- Internal Remote Disconnect / Reconnect Switch
- Flexibility to derive smart functionality from meter memory or the system



Sensus Metering Systems Confidential





TM-iX0A-0805

Version 1.1

